

ABSTRACT

The present invention discloses a NOx sensor for accurately detecting the total concentration of nitrogen oxides in a measured gas without being affected by interference gases. The sensor comprises a gas treatment chamber 5 arranged at the prior stage of the gas detection chamber 3, an inorganic porous member 25 loaded in the gas treatment chamber, and a NOx conversion pumping cell 14,15 and/or an oxygen supplying pumping cell which supplies oxygen into the gas treatment chamber. When the measured gas is introduced in the gas treatment chamber, the interference gases contained in the measured gas are effectively oxidized by the supplied oxygen under the assistance of the catalytic activity of inorganic porous member. The total amount of the nitrogen oxides is measured in the gas detection chamber while NOx in the measured gas are converted into a single component (NO₂ or NO) by the NOx conversion pumping cell after the interference gases are oxidized.